REMARKS

Claims 10-18 are pending. No claims have been allowed.

Responsive to the Examiner's objection regarding the Specification, Applicant has Amended Paragraph [0001], which paragraph was originally presented in the Substitute Specification filed with the Preliminary Amendment of July 21, 2003. By the present Amendment, Applicant has updated Paragraph [0001] to conform same to the "Related U.S. Application Data" on the over page of the present application as published, namely, U.S. Application Publication No. 2004/0069298. No new matter has been added.

The Examiner rejected Claims 10-18 under 35 U.S.C. §103 as being obvious in view of Japanese Publication No. 01-297059 ("JP '059") in view of Japanese Publication No. 09-183856 ("JP '856").

JP '059 discloses a "warm heat sticking agent" and "exothermic member tacky adhesive agent", *i.e.*, a type of adhesive, which is used to attach an exothermic member or heat element to the skin. JP '059 does not appear to disclose any details regarding the exothermic member itself. The warm heat sticking agent includes a water-absorptive polymer which absorbs water and/or sweat from the skin, as well as other ingredients such as a block copolymer, alicyclic petroleum resin, and a softener. In use, the warm heat sticking agent is "combin[ed]" with the exothermic member to secure the exothermic member to the skin, and presumably absorbs water and/or sweat to maintain the integrity of the attachment.

JP '856 discloses a method for obtaining an absorbent material for use in diapers, sanitary napkins, incontinentia pads, etc., for absorbing water or other moisture. A water-containing gel of a cross-linked hydrophilic polymer, along with an alcohol and a polyester fiber, for example, is fed through rollers and thereby pressurized and heated to remove water from the gel and form a material sheet. The resulting dry material sheet is effective for absorbing water.

Independent Claims 10 and 11 call for a method for preparing a united flexible exothermic medium, and a method for preparing a heating element which has a united flexible exothermic medium, each including the steps of: mixing an exothermic agent which generates heat in contact with air and a water-absorptive polymer to form a first mixture; mixing the first mixture with an alcohol which is selected from the group consisting of

ethanol, isopropyl alcohol, ethylene glycol, propylene glycol and glycerin to form a second mixture; and subjecting the second mixture to pressure.

Applicant respectfully submits that independent Claims 10 and 11, as well as Claims 12-18 which depend therefrom, are not obvious in view of JP '059 in combination with JP '856 because one of ordinary skill in the art, without knowledge of Applicant's claimed invention, would not combine the disclosures of JP '059 and JP '856 in the manner relied upon by the Examiner.

In particular, as discussed above, JP '059 does not relate to a method of preparing an exothermic member or heating element itself, but rather discloses a "tacky adhesive agent" which is used to attach an exothermic member or heating element to the skin. Similarly, JP '856 does not relate to exothermic mediums or heating elements at all, but rather relates to preparing a water absorbent material by pressurizing a mixture containing, *inter alia*, a water-containing gel of a hydrophilic polymer to remove water from the gel.

In view of the foregoing, neither JP '059 nor JP '856, either alone or in combination, discloses at least the step of mixing an exothermic agent which generates heat in contact with air and a water absorbent polymer to form a first mixture, as called for in each of independent Claims 10 and 11.

Further, one or ordinary skill in the art would not prepare the "tacky adhesive agent" of JP '059 using a process which involves the application of pressure, such as passing the "tacky adhesive agent" through rollers with heating as disclosed by JP '856, as such process would be unworkable, namely, the "tacky adhesive agent" would stick to the rollers or any other device which is used to apply pressure.

Additionally, the claimed methods of independent Claims 10 and 11 provide unexpected results. Specifically, the heating element prepared by the claimed methods has a very high flexibility as compared with prior art heating elements, and may be fitted on any curved part of the body, including the face. In addition, the exothermic period per unit weight of the exothermic agent unexpectedly becomes very long, as described in Embodiment 1, which makes it possible to make the heating element lighter and thinner and therefore make the users feel more comfortable. (*See* Paragraphs 19 and 59-63, and Figs. 1a and 1b of the present application as published, U.S. Application Publication No. 2004/0069298).

The foregoing improvements regarding the functional and exothermic characteristics of the flexible medium and heating element of the present invention, made by the processes claimed in independent Claims 10 and 11, have been developed for the first time by Applicant and are not disclosed, taught, nor suggested by JP '059 and JP '856, either alone or in combination with one another.

It is believed that the above represents a complete response to the Official Action and reconsideration is requested. Specifically, Applicant respectfully submits that the application is in condition for allowance and respectfully requests allowance thereof.

In the event Applicant has overlooked the need for an additional extension of time, payment of fee, or additional payment of fee, Applicant hereby petitions therefore and authorizes that any charges be made to Deposit Account No. 02-0385, Baker & Daniels.

Should the Examiner have any further questions regarding any of the foregoing, he is respectfully invited to telephone the undersigned at (260) 424-8000.

Respectfully submitted,

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CERTIFICATION OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: September 7, 2004

ADAM F. COX, REG. NO. 46,644
Name of Registered Representative

Signature

September 7, 2004
Date